

## Product datasheet for RC206950L4

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### GABARAPL2 (NM\_007285) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: GABARAPL2 (NM\_007285) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: GABARAPL2

Synonyms: ATG8; ATG8C; GATE-16; GATE16; GEF-2; GEF2

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC206950).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_007285

ORF Size: 351 bp





### GABARAPL2 (NM\_007285) Human Tagged Lenti ORF Clone - RC206950L4

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 007285.5</u>

 RefSeq Size:
 450 bp

 RefSeq ORF:
 354 bp

 Locus ID:
 11345

 UniProt ID:
 P60520

 Cytogenetics:
 16q23.1

Domains: MAP1 LC3

**Protein Pathways:** Regulation of autophagy

**MW:** 13.5 kDa

**Gene Summary:** Ubiquitin-like modifier involved in intra-Golgi traffic. Modulates intra-Golgi transport through

coupling between NSF activity and SNAREs activation. It first stimulates the ATPase activity of

NSF which in turn stimulates the association with GOSR1 (By similarity). Involved in

autophagy. Plays a role in mitophagy which contributes to regulate mitochondrial quantity

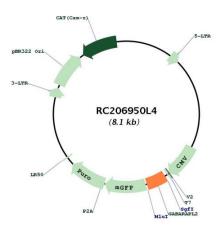
and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in

elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a

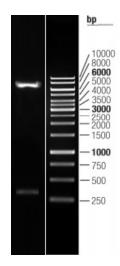
later stage in autophagosome maturation.[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for RC206950L4



Double digestion of RC206950L4 using Sgfl and Mlul